

**Oracle Utilities Cloud Services**  
Database Changes Guide  
For 23A Releases  
**F76044-02**

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Oracle Utilities Cloud Services 23A Database Changes Guide

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# Chapter 1

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## Cloud Services Database Changes Guide

Welcome to the Oracle Utilities Cloud Services Database Changes Guide. This document describes changes in the database in the 23A release of the following Oracle Utilities cloud services:

- [Oracle Utilities Billing Cloud Service](#)
- [Oracle Utilities Customer Care and Billing Cloud Service](#)
- [Oracle Utilities Customer Cloud Service](#)
- [Oracle Utilities Digital Asset Cloud Service](#)
- [Oracle Utilities Market Settlements Management Cloud Service](#)
- [Oracle Utilities Meter Solution Cloud Service](#)
- [Oracle Utilities Operational Device Cloud Service](#)
- [Oracle Utilities Rate Cloud Service](#)
- [Oracle Utilities Work and Asset Cloud Service](#)

This document includes:

- [Cloud Services and Database Changes](#)
- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

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# Cloud Services and Database Changes

This section outlines the database changes that apply to each of the following cloud services:

- [Billing Cloud Service](#)
- [Customer Care and Billing Cloud Service](#)
- [Customer Cloud Service](#)
- [Digital Asset Cloud Service](#)
- [Market Settlements Management Cloud Service](#)
- [Meter Solution Cloud Service](#)
- [Operational Device Cloud Service](#)
- [Rate Cloud Service](#)
- [Work and Asset Cloud Service](#)

## Billing Cloud Service

The following database changes apply to Oracle Utilities Billing Cloud Service:

- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Customer Care and Billing Cloud Service

The following database changes apply to Oracle Utilities Customer Care and Billing Cloud Service:

- [Customer-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Customer Cloud Service

The following database changes apply to Oracle Utilities Customer Cloud Service:

- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Digital Asset Cloud Service

The following database changes apply to Oracle Utilities Digital Asset Cloud Service:

- [Customer-Related Database Changes](#)
- [Meter-Related Database Changes](#)

- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Market Settlements Management Cloud Service

The following database changes apply to Oracle Utilities Market Settlements Management Cloud Service:

- [Meter-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Meter Solution Cloud Service

The following database changes apply to Oracle Utilities Meter Solution Cloud Service:

- [Meter-Related Database Changes](#)
- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Operational Device Cloud Service

The following database changes apply to Oracle Utilities Operational Device Cloud Service:

- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Rate Cloud Service

The following database changes apply to Oracle Utilities Rate Cloud Service:

- [Customer-Related Database Changes](#)
- [Application Framework Database Changes](#)

## Work and Asset Cloud Service

The following database changes apply to Oracle Utilities Work and Asset Cloud Service:

- [Work and Asset-Related Database Changes](#)
- [Application Framework Database Changes](#)

# Chapter 2

## Customer-Related Database Changes

This chapter provides lists of customer-related database changes in the 23A release of Oracle Utilities cloud services. This includes:

- [New Tables](#)
- [New Indexes](#)
- [New Columns](#)
- [Updated Columns](#)

### New Tables

Table	Name	Description
C1_CS_REQ_TYPE_REL_UPD	CS Request Type Related Update	Table used to store details about related updates associated with a customer service request type.
C1_CS_REQ_TYPE_SVC_CRIT	CS Request Type Svc Criteria	Child table of Customer Service Request Type table, used to store criteria used by request types
C1_CS_REQ_TYPE_SVC_CRIT_ALG	CS Request Type Criteria Algorithm	Child table of CS Request Type Svc Criteria table, used to store algorithms used by request type criteria
C1_CS_REQ_TYPE_SVC_CRIT_L	CS Request Type Criteria Language	Language table for CS Request Type Svc Criteria
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CS Request Type Criteria SA Type	Child table of CS Request Type Svc Criteria table, used to store service agreement types used by request type criteria

C1_CS_REQ_TYPE_SVC_CRIT_STOP	CS Request Type Criteria Start Option	Child table of CS Request Type Criteria SA Type table, used to store service agreement type start options used by request type criteria
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## New Indexes

Table_Name	Index_Name
C1_CS_REQ_TYPE_REL_UPD	C1C173P0
C1_CS_REQ_TYPE_REL_UPD	C1C173S1
C1_CS_REQ_TYPE_REL_UPD	C1C173S2
C1_CS_REQ_TYPE_REL_UPD	C1C173S3
C1_CS_REQ_TYPE_REL_UPD	C1C173S4
C1_CS_REQ_TYPE_REL_UPD	C1C173S5
C1_CS_REQ_TYPE_REL_UPD	C1C173S6
C1_CS_REQ_TYPE_REL_UPD	C1C173S7
C1_CS_REQ_TYPE_SVC_CRIT	C1C168P0
C1_CS_REQ_TYPE_SVC_CRIT_ALG	C1C170P0
C1_CS_REQ_TYPE_SVC_CRIT_L	C1C169P0
C1_CS_REQ_TYPE_SVC_CRIT_SATY	C1C171P0
C1_CS_REQ_TYPE_SVC_CRIT_STOP	C1C172P0

## New Columns

Table_Name	Column_Name	Data Type	Data Length
C1_CS_REQ_TYPE_REL_UPD	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_REL_UPD	BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	CHAR_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_REL_UPD	VARCHAR	254
C1_CS_REQ_TYPE_REL_UPD	CS_REQ_TYPE_REL_UPD_SEQ	NUMBER	3
C1_CS_REQ_TYPE_REL_UPD	FLD_NAME	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	REL_UPD_PROC_ALG_CD	CHAR	12



C1_CS_REQ_TYPE_REL_UPD	SEQ_NUM	NUMB	3
C1_CS_REQ_TYPE_REL_UPD	TBL_NAME	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	UPD_ELEM_XPATH	CHAR	254
C1_CS_REQ_TYPE_REL_UPD	UPD_ENT_BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_REL_UPD	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT	BO_XML_DATA_AREA	XML	1073741824
C1_CS_REQ_TYPE_SVC_CRIT	BUS_OBJ_CD	CHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	C1_ANSWER_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	C1_QUESTION_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_BASIS_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_COMPARISON_VALUE	VARCHAR	254
C1_CS_REQ_TYPE_SVC_CRIT	CRITERIA_OPERATOR_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_FALSE_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_INSUFFICIENT_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CSRT_SEC_TRUE_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT	START_SA_OVRD_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT	STOP_SA_OVRD_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ALG_CD	CHAR	12
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ALG_ENTITY_FLG	CHAR	4
C1_CS_REQ_TYPE_SVC_CRIT_ALG	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_ALG	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_ALG	SEQ_NUM	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_ALG	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_L	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_L	DESCR100	VARCHAR	100
C1_CS_REQ_TYPE_SVC_CRIT_L	DESCRLONG	VARCHAR	4000
C1_CS_REQ_TYPE_SVC_CRIT_L	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_L	LANGUAGE_CD	CHAR	3
C1_CS_REQ_TYPE_SVC_CRIT_L	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CIS_DIVISION	CHAR	5
C1_CS_REQ_TYPE_SVC_CRIT_SATY	CS_REQ_TYPE_CD	VARCHAR	30

C1_CS_REQ_TYPE_SVC_CRIT_SATY	DEFAULT_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT_SATY	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_SATY	SA_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_SVC_CRIT_SATY	VERSION	NUMBER	5
C1_CS_REQ_TYPE_SVC_CRIT_STOP	CIS_DIVISION	CHAR	5
C1_CS_REQ_TYPE_SVC_CRIT_STOP	CS_REQ_TYPE_CD	VARCHAR	30
C1_CS_REQ_TYPE_SVC_CRIT_STOP	DEFAULT_SW	CHAR	1
C1_CS_REQ_TYPE_SVC_CRIT_STOP	ELIGIBILITY_CRITERIA_SEQ	NUMBER	3
C1_CS_REQ_TYPE_SVC_CRIT_STOP	SA_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_SVC_CRIT_STOP	START_OPT_CD	CHAR	12
C1_CS_REQ_TYPE_SVC_CRIT_STOP	VERSION	NUMBER	5
C1_QUESTION	C1_ANSWER_STYLE_FLG	CHAR	4
C1_QUESTION	CHAR_TYPE_CD	CHAR	8
C1_CS_REQ_TYPE_QUESTION	DFLT_ANSWER	VARCHAR	254

## Updated Columns

Table_Name	Column_Name	Old Data Type	New Data Type
C1_CS_REQ_SA_SP	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
C1_RC_READ_GTT	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BCHG_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BCHG_UP_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_BSEG_READ	USE_PCT	NUMBER(3,0)	NUMBER(5,2)
CI_SA_SP	USE_PCT	NUMBER(3,0)	NUMBER(5,2)

# Chapter 3

## Meter-Related Database Changes

This chapter provides lists of meter-related database changes in the 23A release of Oracle Utilities cloud services. This includes:

- [New Indexes](#)
- [New Columns](#)
- [Dropped Columns](#)
- [Dropped Indexes](#)

### New Indexes

Table_Name	Index_Name
D1_GTT4	D1T407P0
D1_GTT7	D1T554P0
D1_GTT8	D1T555P0
D1_EVT_PARTICIPATION	D1T652S1*
D1_EVT_PARTICIPATION	D1T639S2*
D1_EVT_PARTICIPATION	D1T639S3*

\* Used by Digital Asset Cloud Service

### New Columns

Table_Name	Column_Name	Data Type	Data Length
D1_DYN_OPT_EVENT	DYN_OPT_EXT_ID_VALUE*	VARCHAR2	120
D1_DYN_OPT_TYPE	DYN_OPT_CATEGORY*	VARCHAR2	254
D1_DYN_OPT_TYPE	DEVICE_REQD_FLG*	CHAR	4

D1_EVT_PARTICIPATION	RESERVATION_START_DTTM*	DATE	26
D1_EVT_PARTICIPATION	RESERVATION_END_DTTM*	DATE	26
D1_EVT_PARTICIPATION	ILM_DT*	DATE	10
D1_EVT_PARTICIPATION	ILM_ARCH_SW*	CHAR	1
D1_SP	D1_INSTALL_DT*	DATE	10

\* Used by Digital Asset Cloud Service

## Dropped Columns

Table_Name	Column_Name	Data Type	Data Length
D1_EVT_PARTICIPATION	EFF_DTTM	DATE	

## Dropped Indexes

Table_Name	Index_Name
D1_GTT4	D1T407S0
D1_GTT7	D1T554S0
D1_GTT8	D1T555S0

# Chapter 4

## Work and Asset-Related Database Changes

This chapter provides lists of work and asset-related database changes in the 22C release of Oracle Utilities cloud services. This includes:

- [New Tables](#)
- [New Columns](#)
- [Modified Columns](#)
- [New Indexes](#)

### New Tables

Table	Name	Description
W1_TMPL_WO_DOCUMENT	Template Work Order Document	Child table of Template Work Order table, used to store documents related to template work orders.
W1_WO_DOCUMENT	Work Order Document	Child table of Work Order table, used to store documents related to work orders.

### New Columns

Table_Name	Column_Name	Data Type	Data Length
W1_ACT_RECON_PROP_UNIT	CU_ID	CHAR	48
W1_ASSET	FIXED_ASSET_NUM	VARCHAR2	240
W1_CU	FIXED_ASSET_NUM	VARCHAR2	240
W1_PROJECT	ERP_CAPITAL_PRJ_FLG	CHAR	16

W1_TMPL_WO_DOCUMENT	ATTACHMENT_ID	CHAR	56
W1_TMPL_WO_DOCUMENT	CRE_DTTM	DATE	7
W1_TMPL_WO_DOCUMENT	DOCUMENT_ID	CHAR	48
W1_TMPL_WO_DOCUMENT	TMPL_WO_ID	CHAR	48
W1_TMPL_WO_DOCUMENT	USER_ID	CHAR	32
W1_TMPL_WO_DOCUMENT	VERSION	NUMBER	22
W1_WORK_LOC	CITY	VARCHAR2	360
W1_WORK_LOC	W1_CITY_UPR	VARCHAR2	360
W1_WORK_REQ	CITY	VARCHAR2	360
W1_WORK_REQ	W1_CITY_UPR	VARCHAR2	360
W1_WO_DOCUMENT	ATTACHMENT_ID	CHAR	56
W1_WO_DOCUMENT	CRE_DTTM	DATE	7
W1_WO_DOCUMENT	DOCUMENT_ID	CHAR	48
W1_WO_DOCUMENT	USER_ID	CHAR	32
W1_WO_DOCUMENT	VERSION	NUMBER	22
W1_WO_DOCUMENT	WO_ID	CHAR	56

## Modified Columns

Table_Name	Column_Name	New Data Type	Old Length	New Length
W1_WORK_LOC	CITY	VARCHAR2	30	90
W1_WORK_LOC	W1_CITY_UPR	VARCHAR2	30	90
W1_WORK_REQ	CITY	VARCHAR2	30	90
W1_WORK_REQ	W1_CITY_UPR	VARCHAR2	30	90

## New Indexes

Table_Name	Index_Name	Column_Name
W1_TMPL_WO_DOCUMENT	W1T970P0	ATTACHMENT_ID
W1_TMPL_WO_DOCUMENT	W1T970P0	DOCUMENT_ID
W1_TMPL_WO_DOCUMENT	W1T970P0	TMPL_WO_ID
W1_WO_DOCUMENT	W1T969P0	ATTACHMENT_ID

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W1_WO_DOCUMENT	W1T969P0	DOCUMENT_ID
W1_WO_DOCUMENT	W1T969P0	WO_ID

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# Chapter 5

## Application Framework Database Changes

This chapter provides lists of database changes in Oracle Utilities Application Framework included with the 23A release of Oracle Utilities cloud services. This includes:

- [New Columns](#)
- [New Views](#)
- [Dropped Columns](#)

### New Columns

Table_Name	Column_Name	Data Type	Data Length
CI_BATCH_RUN	LOG_FILE_NAME	Varchar2	254
F1_BATCH_RUN_ANALYTICS_SNAP	ELAPSED_SECS	Number	22

### New Views

View_Name
F1_MENU_APP_SVCS_VW

### Dropped Columns

Table_Name	Column_Name
F1_BATCH_RUN_ANALYTICS_SNAP	ELAPSED_TIME
F1_BATCH_RUN_ANALYTICS_SNAP	JOB_END_MINS



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F1_BATCH_RUN_ANALYTICS_SNAP	JOB_START_MINS
F1_BATCH_RUN_ANALYTICS_SNAP	JOB_TOTAL_MINS

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